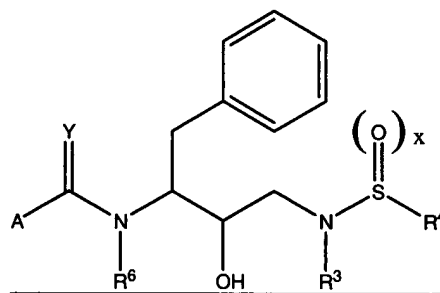
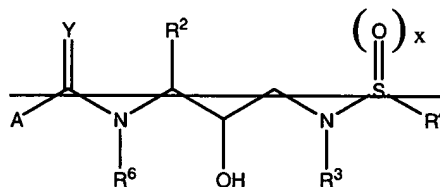


This Listing of Claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (amended) A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

~~R² is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo, nitro, cyano, CF₃, OR⁹, and SR⁹, wherein R⁹ is a radical selected from the group consisting of hydrogen and alkyl;~~

R³ is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radicals, wherein said substituents are selected

from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R⁴ is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R⁶ is a hydrogen or alkyl radical;

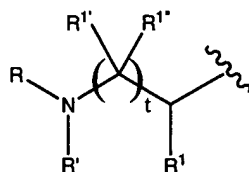
x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, cycloalkylalkoxy, cycloalkylalkyl, aralkyl, aryl, aryloxy, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heterocycloalkylalkoxy, heteroaralkyl, heteroaralkoxy, heteroaryloxy, heteroaryl,

alkenyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyl radicals; or where said amino radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, cycloalkylcarbonyl, cycloalkylalkoxycarbonyl, cycloalkylalkanoyl, carboxyalkanoyl, alkanoyl, aralkanoyl, aroyl, aryloxy carbonyl, aryloxy carbonylalkyl, aryloxyalkanoyl, heterocyclylcarbonyl, heterocyclyloxy carbonyl, heterocyclylalkanoyl, heterocyclylalkoxycarbonyl, heteroaralkanoyl, heteroaralkoxycarbonyl, heteroaryloxy carbonyl, heteroaroyl, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyl radicals; or wherein said aminocarbonyl or aminoalkanoyl radicals are disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

R' is a radical as defined for R³ or R"SO₂—, wherein R" is a radical as defined for R³; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R¹ is a hydrogen, —CO₂CH₃, —CH₂CO₂CH₃, —CO₂H, —CH₂CO₂H, —CH₂CH₂CONH₂, —CH₂CONH₂, —CONH₂, —CH₂C(O)NHCH₃, —CH₂C(O)N(CH₃)₂, —CONHCH₃, —CONH(CH₃)₂, —CH₂SO₂NH₂, —CH₂CH₂SO₂NH₂, —CH₂S[O]CH₃, —CH₂S[O]₂CH₃, —C(CH₃)₂(SCH₃), —C(CH₃)₂(S[O]CH₃), —C(CH₃)₂(S[O]₂CH₃), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

each of R^{1'} and R^{1''} are independently a radical as defined for R¹; or one of R^{1'} and R^{1''} together with R¹ and the carbon atoms to which R¹, R^{1'} and R^{1''} are attached, form a cycloalkyl radical.

2. (amended) The compound of claim 1 or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

~~R² is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and OR⁹, wherein R⁹ is a radical selected from the group consisting of hydrogen and alkyl;~~

R³ is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radicals, wherein said substituents are selected from the group consisting of alkyl, aralkyl, cycloalkyl and cycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical;

R⁴ is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

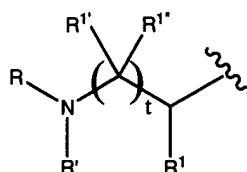
R⁶ is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, cycloalkylalkoxy, cycloalkylalkyl, aralkyl, aryl, aryloxy, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heterocycloalkylalkoxy, heteroaralkyl, heteroaralkoxy, heteroaryloxy, heteroaryl, hydroxyalkyl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said amino radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl radical; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aralkanoyl, aroyl, heterocyclylcarbonyl, heterocyclyloxycarbonyl, heterocyclylalkanoyl, heterocyclylalkoxycarbonyl, heteroaralkanoyl, heteroaralkoxycarbonyl, heteroaryloxy-carbonyl, heteroaroyl, alkyl, cycloalkyl, aralkyl, hydroxyalkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or wherein said aminocarbonyl or aminoalkanoyl radicals are disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

R' is a hydrogen, alkyl or aralkyl radical or R"SO₂-, wherein R" is a radical as defined for R³; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R¹ is a hydrogen, -CO₂CH₃, -CH₂CO₂CH₃, -CO₂H, -CH₂CO₂H, -CH₂CH₂CONH₂, -CH₂CONH₂, -CONH₂, -CH₂C(O)NHCH₃, -CH₂C(O)N(CH₃)₂, -CONHCH₃, -CONH(CH₃)₂, -CH₂SO₂NH₂, -CH₂CH₂SO₂NH₂, -CH₂S[O]CH₃, -CH₂S[O]₂CH₃, -C(CH₃)₂(SCH₃), -C(CH₃)₂(S[O]CH₃), -C(CH₃)₂(S[O]₂CH₃), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aralkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where said aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

each of R^{1'} and R^{1''} are independently a radical as defined for R¹; or one of R^{1'} and R^{1''} together with R¹ and the carbon atoms to which R¹, R^{1'} and R^{1''} are attached, form a cycloalkyl radical.

3. (amended) The compound of claim 2 or a pharmaceutically acceptable salt or ester thereof, wherein

~~R² is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and -OR⁹, wherein R⁹ is a radical selected from the group consisting of hydrogen and alkyl;~~

R^3 is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

R^4 is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

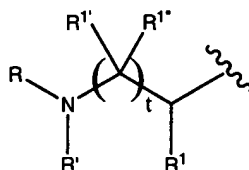
R^6 is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aroyl, heteroaroyl, alkyl, aralkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO₂—, wherein R" is a radical as defined for R³; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R¹ is a hydrogen, —CO₂CH₃, —CH₂CO₂CH₃, —CO₂H, —CH₂CO₂H, —CH₂CH₂CONH₂, —CH₂CONH₂, —CONH₂, —CH₂C(O)NHCH₃, —CH₂C(O)N(CH₃)₂, —CONHCH₃, —CONH(CH₃)₂, —CH₂SO₂NH₂, —CH₂CH₂SO₂NH₂, —CH₂S[O]CH₃, —CH₂S[O]₂CH₃, —C(CH₃)₂(SCH₃), —C(CH₃)₂(S[O]CH₃), —C(CH₃)₂(S[O]₂CH₃), alkyl, hydroxyalkyl, cyanoalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylalkyl, alkylthioalkyl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl and aralkyl radicals; and

R^{1'} is a hydrogen, alkyl or aralkyl; and R^{1''} is a hydrogen, alkyl, —CO₂CH₃ or —CONH₂; or one of R^{1'} and R^{1''} together with R¹ and the carbon atoms to which R¹, R^{1'} and R^{1''} are attached, form a cycloalkyl radical.

4. (amended) The compound of claim 3 or a pharmaceutically acceptable salt or ester thereof, wherein

~~R² is an alkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and -OR⁹, wherein R⁹ is a radical selected from the group consisting of hydrogen and alkyl;~~

R³ is a hydrogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

R⁴ is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

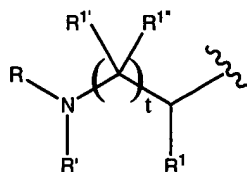
R⁶ is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aroyl, heteroaroyl, alkyl, aralkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO₂—, wherein R" is a radical as defined for R³; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R¹ is a hydrogen, —CO₂H, —CH₂CO₂H, —CH₂CH₂CONH₂, —CH₂CONH₂, —CONH₂, —CH₂C(O)NHCH₃, —CH₂C(O)N(CH₃)₂, —CONHCH₃, —CONH(CH₃)₂, —CH₂SO₂NH₂, —CH₂CH₂SO₂NH₂, alkyl, hydroxyalkyl, cyanoalkyl, alkynyl, cycloalkylalkyl, alkylthioalkyl, aralkyl or heteroaralkyl radical; and

R^{1'} is a hydrogen, alkyl or aralkyl; and R^{1''} is a hydrogen, alkyl, —CO₂CH₃ or —CONH₂; or one of R¹ and R^{1''} together with R¹ and the carbon atoms to which R¹, R^{1'} and R^{1''} are attached, form a cycloalkyl radical;

with the proviso that alkyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical containing from one to eight carbon atoms; alkenyl, alone or in combination, is a straight-chain or branched-chain

hydrocarbon radical having at least one double bond and containing from two to eight carbon atoms; alkynyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one triple bond and containing from two to ten carbon atoms; and cycloalkyl, alone or in combination, is a hydrocarbon ring containing from three to eight carbon atoms.

5. (amended) The compound of claim 4 or a pharmaceutically acceptable salt or ester thereof, wherein

R^2 is an alkyl, cycloalkylalkyl or aralkyl radical, which radical is optionally substituted with a radical selected from the group consisting of alkyl, halo and $-OR^9$, wherein R^9 is a radical selected from the group consisting of hydrogen and alkyl;

R^3 is a hydrogen, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, alkylthioalkyl, alkylsulfonylalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or dialkyl substituted aminoalkyl radical;

R^4 is an alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, aralkenyl or heteroaralkyl radical;

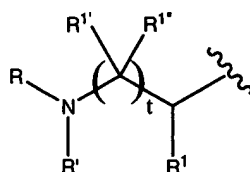
R^6 is a hydrogen or alkyl radical;

x is 1 or 2;

t is 0 or 1; and

Y is O or S; and

A is an alkoxy, alkenoxy, aralkoxy, alkyl, cycloalkyl, aryl, heterocycloalkyl, heterocycloalkoxy, heterocycloalkylalkyl, heteroaralkoxy, heteroaryl, amino, or mono- or disubstituted amino radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals; or is represented by the formula



wherein R is a hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, carboxyalkanoyl, alkanoyl, aroyl, heteroaroyl, alkyl, aralkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are selected from the group consisting of alkyl and aralkyl radicals;

R' is a hydrogen, alkyl or aralkyl radical or R"SO₂-, wherein R" is a radical as defined for R³; or R and R' together with the nitrogen to which they are attached form a heterocycloalkyl or heteroaryl radical;

R¹ is a hydrogen, -CO₂H, -CH₂CO₂H, -CH₂CH₂CONH₂, -CH₂CONH₂, -CONH₂, -CH₂C(O)NHCH₃, -CH₂C(O)N(CH₃)₂, -CONHCH₃, -CONH(CH₃)₂, -CH₂SO₂NH₂, -CH₂CH₂SO₂NH₂, alkyl, hydroxyalkyl, cyanoalkyl, alkynyl, cycloalkylalkyl, alkylthioalkyl, aralkyl or heteroaralkyl radical; and

R^{1'} is a hydrogen, alkyl or aralkyl; and R^{1''} is a hydrogen, alkyl, -CO₂CH₃ or -CONH₂; or one of R^{1'} and R^{1''} together with R¹ and the carbon atoms to which R¹, R^{1'} and R^{1''} are attached, form a cycloalkyl radical;

with the proviso that alkyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical containing from one to five carbon atoms; alkenyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one double bond and containing from two to five carbon atoms; alkynyl, alone or in combination, is a straight-chain or branched-chain hydrocarbon radical having at least one triple bond and containing from two to five carbon atoms; and cycloalkyl, alone or in combination, is a hydrocarbon ring containing from three to eight carbon atoms; ~~and with the proviso that when R² is cycloalkylalkyl and t is 0, R' is a group other than alkoxy carbonyl.~~

6. (amended) The compound of claim 5 or a pharmaceutically acceptable salt or ester thereof, wherein

~~R² is butyl, cyclohexylmethyl, benzyl, 4-fluorobenzyl or naphthylmethyl;~~

R³ is methyl, ethyl, propyl, butyl, pentyl, hexyl, iso-butyl, iso-amyl, 3-methoxypropyl, 3-methylthiopropyl, 4-methylthiobutyl, 4-methylsulfonylbutyl, 2-dimethylaminoethyl, 2-(1-morpholino)ethyl, 4-hydroxybutyl, allyl, propargyl, cyclohexylmethyl, cyclopropylmethyl, phenyl, benzyl, 4-fluorobenzyl, 4-methoxybenzyl, 1-phenylethyl, 2-phenylethyl, naphthylmethyl, 3-pyridylmethyl or 4-pyridylmethyl;

R⁴ is methyl, ethyl, propyl, butyl, ethenyl, chloromethyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, phenyl, naphthyl, chlorophenyl, fluorophenyl, hydroxyphenyl, methylphenyl, methoxyphenyl, ethoxyphenyl, methylthiophenyl, methylsulfoxyphenyl, methylsulfonylphenyl, acetamidophenyl, methoxycarbonylphenyl, dimethylaminophenyl, nitrophenyl, trifluoromethylphenyl, benzyl, 2-phenylethenyl or thienyl;

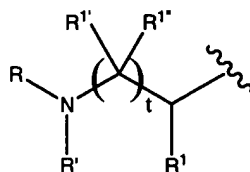
R⁶ is hydrogen;

x is 2;

t is or 1; and

Y is O; and

A is methyl, cyclohexyl, cyclopentyl, cycloheptyl, 1,2,3,4-tetrahydronaphthyl, naphthyl, quinolinyl, indolyl, pyridyl, methylpyridyl, furanyl, thiophenyl, oxazolyl, thiazolyl, phenyl, methylphenyl, ethylphenyl, dimethylphenyl, iso-propylphenyl, chlorophenyl, hydroxyphenyl, methoxyphenyl, methylsulfonylphenyl, methylsulfonylmethylphenyl, carboxyphenyl, aminocarbonylphenyl, methylhydroxyphenyl, methylnitrophenyl, methylaminophenyl, methyl-N,N-dimethylaminophenyl, t-butoxy, benzyloxy, pyridylmethoxy, 3-propenoxo, hydroxypyridylmethoxy, aminopyridylmethoxy, pyrimidinylmethoxy, N-oxo-pyrimidinylmethoxy, thiazolylmethoxy, tetrahydrothiophenoxy, 1,1-dioxotetrahydrothiophenoxy, tetrahydrofuranoxy, methylamino, benzylamino or isopropylamino; or is represented by the formula



wherein R is hydrogen, acetyl, phenoxyacetyl, methoxyacetyl, naphthaloxyacetyl, succinoyl, 2-methylpropionoyl, 2-hydroxypropionoyl, t-butoxycarbonyl, benzyloxycarbonyl, methoxybenzyloxycarbonyl, aminocarbonyl, quinolinylcarbonyl, N-methylglycyl or N,N-dimethylglycyl;

R' is hydrogen, benzyl or methyl; or R and R' together with the nitrogen to which they are attached form pyrrolyl;

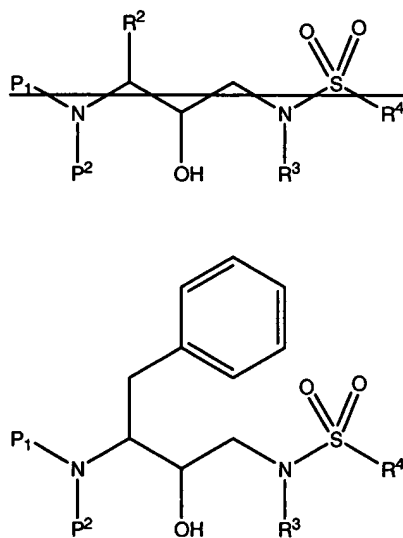
R¹ is hydrogen, -CO₂H, -CH₂CO₂H, -CH₂CH₂CONH₂, -CH₂CONH₂, -CONH₂, -CH₂C(O)NHCH₃, -CH₂C(O)N(CH₃)₂, -CONHCH₃, -CONH(CH₃)₂, -CH₂SO₂NH₂, -CH₂CH₂SO₂NH₂, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, 3-methylbutyl, cyclohexylmethyl, benzyl, hydroxybenzyl, imidazolyl, imidazolymethyl, cyanomethyl, methylthiomethyl, propargyl or hydroxyethyl; and

R' is hydrogen, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, benzyl, phenylethyl, phenylpropyl, phenylbutyl or 4,4-diphenylbutyl; and R'' is hydrogen, methyl, -CO₂CH₃ or -CONH₂; or one of R' and R'' together with R¹ and the carbon atoms to which R¹, R' and R'' are attached, form cyclobutyl, cyclopentyl or cyclohexyl;

~~with the proviso that when R² is cyclohexylmethyl and t is 0, R' is a group other than t-butoxycarbonyl.~~

7. (canceled)

8. (amended) A compound represented by the formula:



or a pharmaceutically acceptable salt, prodrug or ester thereof, wherein

each of P¹ and P² independently represent hydrogen, alkoxycarbonyl, aralkoxycarbonyl, alkylcarbonyl, cycloalkylcarbonyl, cycloalkylalkoxycarbonyl, cycloalkylalkanoyl, alkanoyl, aralkanoyl, aroyl, aryloxycarbonyl, aryloxycarbonylalkyl, aryloxyalkanoyl, heterocyclcarbonyl, heterocyclyloxycarbonyl, heterocyclylalkanoyl, heterocyclylalkoxycarbonyl, heteroaralkanoyl, heteroaralkoxycarbonyl, heteroaryloxycarbonyl, heteroaroyl, alkyl, alkenyl, cycloalkyl, aryl, aralkyl, aryloxyalkyl, heteroaryloxyalkyl, hydroxyalkyl, aminocarbonyl, aminoalkanoyl, or mono- or disubstituted aminocarbonyl or mono- or disubstituted aminoalkanoyl radical, wherein the substituents are

selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkyl radicals; or where said aminoalkanoyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached form a heterocycloalkyl or heteroaryl radical;

~~R² is an alkyl, aryl, cycloalkyl, cycloalkylalkyl or aralkyl radical, which radicals are optionally substituted with a group selected from alkyl and halogen radicals, nitro, cyano, CF₃, OR⁹, SR⁹, wherein R⁹ is a hydrogen or alkyl radical;~~

R³ is a hydrogen, alkyl, haloalkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl, cycloalkyl, cycloalkylalkyl, heterocycloalkyl, heteroaryl, heterocycloalkylalkyl, aryl, aralkyl, heteroaralkyl, aminoalkyl or mono- or disubstituted aminoalkyl radical, wherein said substituents are selected from the group consisting of alkyl, aryl, aralkyl, cycloalkyl, cycloalkylalkyl, heteroaryl, heteroaralkyl, heterocycloalkyl and heterocycloalkylalkyl radicals; or where the aminoalkyl radical is disubstituted, said substituents along with the nitrogen atom to which they are attached, form a heterocycloalkyl or a heteroaryl radical; and

R⁴ is a radical as defined by R³ except for hydrogen.

9. (amended) The compound of claim 8, wherein each of P¹ and P² independently represent a hydrogen, alkoxy carbonyl, aralkyloxy carbonyl, heteroaralkoxy carbonyl, aroyl, heteroaroyl, alkanoyl or cycloalkanoyl radical;

~~R² is a cycloalkylalkyl, aralkyl or alkyl radical;~~

R³ is an alkyl, cycloalkyl or cycloalkylalkyl radical; and

R⁴ is an aryl, alkyl, heteroaryl or aryl radical.

10. (amended) The compound of claim 9, wherein P¹ and P² independently represent hydrogen, 3-pyridylmethyloxycarbonyl, 3-pyridylmethyloxycarbonyl N-oxide, 4-pyridylmethyloxycarbonyl, 4-pyridylmethyloxycarbonyl N-oxide, 5-pyrimidylmethyloxycarbonyl, tert-butyloxycarbonyl, allyloxycarbonyl, 2-propyloxycarbonyl, benzyloxycarbonyl, cycloheptylcarbonyl, cyclohexylcarbonyl, cyclopentylcarbonyl, benzoyl, 4-pyridylcarbonyl, 2-methylbenzoyl, 3-methylbenzoyl, 4-methylbenzoyl, 2-chlorobenzoyl, 2-ethylbenzoyl, 2,6-dimethylbenzoyl, 2,3-dimethylbenzoyl, 2,4-dimethylbenzoyl or 2,5-dimethylbenzoyl;

R² is benzyl, cyclohexylmethyl, 2-naphthylmethyl, para-fluorobenzyl, para-methoxybenzyl, isobutyl or n-butyl;

R³ is isobutyl, isoamyl, cyclohexyl, cyclohexylmethyl, n-butyl or n-propyl; and

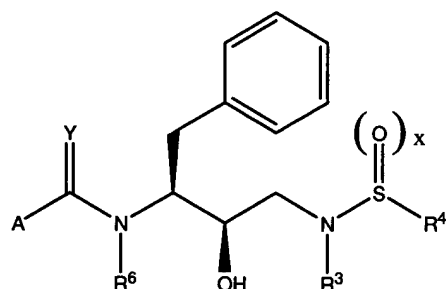
R⁴ is phenyl, para-methoxyphenyl, para-cyanophenyl, para-chlorophenyl, para-hydroxyphenyl, para-nitrophenyl, para-fluorophenyl, 2-naphthyl, 3-pyridyl, 3-pyridyl N-oxide, 4-pyridyl or 4-pyridyl N-oxide;

~~with the proviso that when R² is cyclohexylmethyl, each of P¹ and P² independently represent a group other than tert-butyloxycarbonyl.~~

11. (canceled)

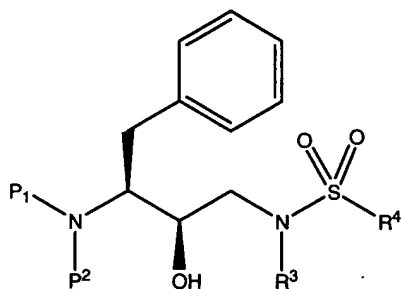
12. (canceled)
13. (original) A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.
14. (original) A pharmaceutical composition comprising a compound of Claim 8 and a pharmaceutically acceptable carrier.
15. (original) Method of inhibiting a retroviral protease comprising administering an effective amount of a compound of Claim 1.
16. (original) Method of inhibiting a retroviral protease comprising administering an effective amount of a compound of Claim 8.
17. (original) Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 13.
18. (original) Method of treating a retroviral infection comprising administering an effective amount of a composition of Claim 14.
19. (original) Method of preventing replication of a retrovirus comprising administering an effective amount of a compound of Claim 1.
20. (original) Method of preventing replication of a retrovirus comprising administering an effective amount of a compound of Claim 8.

21. (new) The compound of claim 1, represented by the formula:



wherein R^3 , R^4 , R^6 , x , Y , and A are as defined in claim 1.

22. (new) The compound of claim 8, represented by the formula:



wherein P^1 , P^2 , R^3 , and R^4 are as defined in claim 8.

23. (new) A pharmaceutical composition comprising a compound of Claim 21 and a pharmaceutically acceptable carrier.